



Whitman County Environmental Health

1205 SE Pro Mall Blvd #203 Pullman, WA 99163

310 N Main Street #108 Colfax, WA 99111

EMAIL: eh@whitmancounty.net

Pullman: 509-332-6752

Colfax: 509-397-6280

ON-SITE SEPTIC SYSTEM INSTALLERS'S EXAM

Read each question carefully. Circle the option you think is the best answer based on information from the EPA Design Manual, Washington State Board of Health On-site Sewage Systems Chapter 246-272A WAC, and Whitman County Rules and Regulations. There are 50 questions. **You need to get 38 questions correct (76%) to pass the test.** Good luck!

1. **When designing a single family residential OSS system, the minimum design flow is _____ gallons per bedroom per day.**
 - a. 5 gpd
 - b. 120 gpd
 - c. 240 gpd
 - d. 600 gpd

2. **The minimum design flow for a single family residential OSS system is _____ gallons per day.**
 - a. 5 gpd
 - b. 120 gpd
 - c. 240 gpd
 - d. 600 gpd

3. **The minimum separation between any dispersal component of an OSS system and any adjacent drinking water well is:**
 - a. 10'
 - b. 20'
 - c. 50'
 - d. 100'

4. **The infiltrative surface of the drain field may not be deeper than _____ feet below the finished grade, except under special conditions approved by the local health officer.**
 - a. 2'
 - b. 3'
 - c. 5'
 - d. 10'

5. **What is the maximum amount of cover over a septic tank lid allowed without installing a riser?**
 - a. 6"
 - b. 12"
 - c. 24"
 - d. 5'

6. **The minimum amount of cover placed over a drain field is:**
 - a. 6"
 - b. 12"

- c. 18"
- d. 24"

7. The use of a baffle at the outlet in a tank is to keep:

- a. Gas from entering the tank from the drain field
- b. Water from saturating the absorption field
- c. The effluent flowing quickly into the drain field
- d. Lighter solids (scum) from leaving the septic tank and clogging the absorption field

8. To abandon a septic tank, cesspool or other sewage container:

- a. Pump the tank
- b. Destroy the lid
- c. Crush the tank and fill the void
- d. All of the above

9. To help prevent settling, septic components - including tanks, distribution boxes and drainfields should be installed:

- a. As deep as possible
- b. As shallow as possible
- c. In undisturbed natural soil
- d. On a gravel bed

10. Which of the following is true about distribution boxes?

- a. The box does not have to be level because it has more than one outlet to feed the absorption bed
- b. The box must set in undisturbed soil to avoid settling of the box causing unequal distribution
- c. The box can be installed in fresh fill
- d. The box should be placed as close to the septic tank as possible

11. The maximum length of individual trenches on a standard gravity system is:

- a. Any length as long as enough space is available
- b. 250'
- c. 100'
- d. 75'

12. To designate the replacement area in between drainfield legs, the minimum horizontal distance between legs must be:

- a. 10' on center
- b. 15' on center
- c. 12' side wall to sidewall
- d. B & C

13. The final step required before installing an onsite sewage system is?

- a. A site evaluation
- b. Submitting a design
- c. Receiving a Construction Permit
- d. Submitting an as-built

- 14. The use of cesspools in Whitman County:**
- Shall not be permitted except under special conditions approved by the Health Officer
 - Are only allowed in repair situations
 - Shall not be permitted under any circumstances
 - Can only be installed in Type 6 soils
- 15. Which of the following is acceptable over the top of a drain field?**
- Parking cars
 - Planting a lawn
 - Paving over with concrete to protect the drain field
 - Power lines or other utilities
- 16. After final inspection of a completed septic system, who can submit the as-built record drawing?**
- A qualified design professional
 - The installer
 - As-builts are not required
 - A or B
- 17. All installations of sewage disposal systems must be inspected and approved before covering by:**
- Whitman County Public Health
 - A licensed bonded installer
 - The homeowner
 - General contractor
- 18. How often does a Whitman County Licensed Onsite Sewage Installer need to be renewed?**
- Every year
 - Every 3 years
 - Every 5 years (or when the Onsite Sewage Code changes)
 - Every 10 years
- 19. In a gravity fed septic system, the infiltrative surface should _____ from the beginning of the infiltrative surface to the end.**
- Maintain elevation
 - Decrease in elevation
 - Increase in elevation
 - Doesn't matter
- 20. In Whitman County, septic system designs for standard gravity systems (with no pumps) can be submitted by:**
- Homeowners
 - Qualified design professionals
 - Licensed installers
 - A & B
 - All of the above

- 21. True or False: A permit is required for the replacement, addition, or modifications of baffles, sewage tank lids, and risers.**
- True
 - False
- 22. Before a design is submitted, what must be done?**
- A site evaluation by Whitman County Public Health to determine drainfield requirements
 - An as-built should be submitted
 - The system should be installed
 - All of the above
- 23. Septic systems including a pump and pressure distribution must be designed by:**
- A licensed installer
 - A homeowner
 - A qualified design professional
 - Any of the above
- 24. When a pump is involved in the septic install, which of the following is required?**
- A final inspection is required with Whitman County Public Health
 - A qualified design professional
 - An electrical inspection is required
 - All of the above
- 25. Upon completion of a septic system installation, copies of the as-built record drawings must be submitted to:**
- Whitman County Public Health
 - The homeowner
 - The system installer
 - A & B
- 26. You are installing a septic system for a new building. You have been asked to install the septic system before the building is erected. You notice that the flow of traffic for construction will be directly over the drainfield area, what do you do?**
- Recommend the septic install wait until after the building construction is finished to avoid driving over the drainfield
 - Do what you were told and install the drainfield before the building
 - Move the drainfield location to an area
 - None of the above
- 27. When a septic system is grossly failing, you are allowed to begin repairs and installation of a replacement system without a Construction Permit.**
- True
 - False

- 28. You are hired for an install on a set of engineered plans. On the plans, you notice a perforated transfer line from the stub out of the building to the septic tank. You should:**
- Quit the job
 - Call Whitman County Health Department
 - Ask for more money to do the install
 - Install the system as designed
- 29. When installing on a slope, drainfield legs should:**
- Run downhill
 - Run uphill
 - Follow the contours of the slope
 - Any of the above
- 30. For a standard gravity residential system, who must sign as the system designer:**
- The homeowner
 - You, the licensed installer
 - A qualified design professional
 - A or C
 - Any of the above
- 31. For an alternative residential or commercial system, who can design the system:**
- The homeowner
 - You, the licensed installer
 - A qualified design professional
 - Any of the above
- 32. A site evaluation is:**
- Always required
 - Required only on new systems
 - Required only for replacements
 - Never required
- 33. As-built drawings are :**
- Always required
 - Required only on new systems
 - Required only for replacements
 - Never required
- 34. Materials such as septic tanks, distribution boxes, and infiltration materials must be:**
- On the Washington State Department of Health Approved Products List
 - Installed to manufacturer's specifications
 - Inspected by Whitman County Public Health at final inspection
 - All of the above

- 35. Septic tanks and distribution boxes must be installed:**
- Level
 - In wet areas
 - With access risers on lids if deeper than 6" below finished grade
 - A & C
- 36. At the time of the final inspection:**
- All electrical inspections must be completed on pumps, if used
 - The entire system should be installed, connected and uncovered for inspection
 - An as-built drawing should be prepared
 - All of the above
- 37. True or False: An installer license gives you permission to design systems and sign as the system designer.**
- True
 - False
- 38. True or False: A site evaluation is required before installing a system.**
- True
 - False
- 39. True or False: A Construction Permit is required before installing a system.**
- True
 - False
- 40. In Whitman County, when are monitoring ports required at the end of drainfield legs?**
- Always
 - Never
 - When the system is alternative or involves a pump
 - On standard gravity systems only
- 41. If a homeowner currently has an existing system and wants to replace, expand, or modify the system in any way, the system must be:**
- Assessed prior to altering
 - Be brought up to current code
 - Be sized for the total number of proposed bedrooms
 - All of the above
- 42. Drainfields must be 100' away from:**
- All drinking water wells on the property
 - All neighboring drinking water wells on adjacent properties
 - All decommissioned wells
 - A & B
- 43. True or False: As a licensed installer, you can charge for designs.**
- True
 - False

- 44. If you are the only licensed installer at your company:**
- You must supervise all installation projects
 - Your license covers your employees to submit designs and install systems
 - You may submit designs
 - You can install without applying for permits
- 45. To become a Qualified Design Professional in Whitman County, you must:**
- Be a professional engineer or Washington State Licensed OSS Design Professional
 - Be a Whitman County Licensed Installer
 - Have experience with septic designs
 - Live in Whitman County
- 46. Your Whitman County Installers License may be revoked if:**
- You install a system without proper permits
 - You repeatedly install systems without following the design approved
 - You are charging for designs without the proper designer credentials
 - All of the above
- 47. You are installing a septic system. The design has been approved and Construction Permit issued. When you arrive to the site, you realize that the drainfield location is in a low lying area. The ground is wet and marshy. You have concerns about this placement. What do you do?**
- Install as designed
 - Call Whitman County Public Health to confirm the design
 - Pump up the hill instead
 - Install shallow
- 48. You are installing a septic system. The design has been approved and Construction Permit issued. The design calls for trenches to be 3' deep. The excavator is struggling with the dense clays and you notice streaking on the sidewall. What do you do?**
- Install as designed
 - Call Whitman County Public Health to confirm the design
 - Pump up the hill instead
 - Install shallow
- 49. You are excavating to place a plastic/poly septic tank and hit groundwater. What is the best option in proceeding?**
- Install as designed
 - Anchor the tank so it doesn't float
 - Wait to install until dry season
 - Call Whitman County Public Health. Recommend a concrete tank or using anchors.
- 50. To be a licensed installer, you should be well equipped and experienced in which of the following?**
- Running an excavator, such as backhoe
 - Using a laser level
 - Reading designs including engineered plans
 - All of the above